

## Metis Business Fundamentals Writeup

**Abstract-** The goal of this project is to pitch the promising use cases of "on-chain analytics" to custody and financial services company "Unchained Capital". The main reason for integrating on-chain analytics into the Unchained-Capital website is to create a user-facing dashboard where customers and potential customers can learn about on-chain metrics.

The impact hypothesis is that by educating existing customers about how the bitcoin blockchain works and the insights that can be extracted from this data, their conviction in bitcoin the asset will increase and will want to allocate more capital to bitcoin. The dashboard will also help attract new customers who are already familiar with on-chain analytics but are not familiar with unchained-capital. Since on-chain analytics is such a new industry, Unchained-Capital could probably become an industry leader in no time. There is very little cost to implementing this approach, namely hiring 1 or 2 data scientists. The upside is unknown but potentially very high.

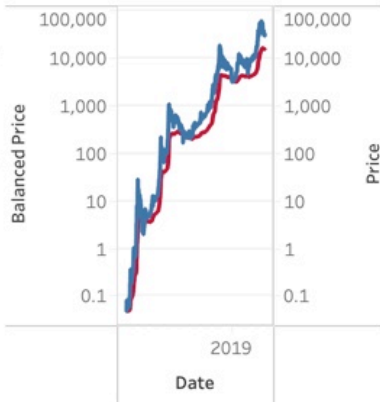
**Design and Data-** Price data was pulled from Kaggle, most metric columns were pulled from glassnode. Address and UTXO data was pulled from the author's own bitcoin node. The data was cleaned using Google Sheets, and final visualizations were made in Tableau.

**Algorithms-** Exploratory data analysis was the main method for analyzing the data. No statistical learning models were used, although for future work there is an entire unexplored frontier when it comes to on-chain data and statistical analysis.

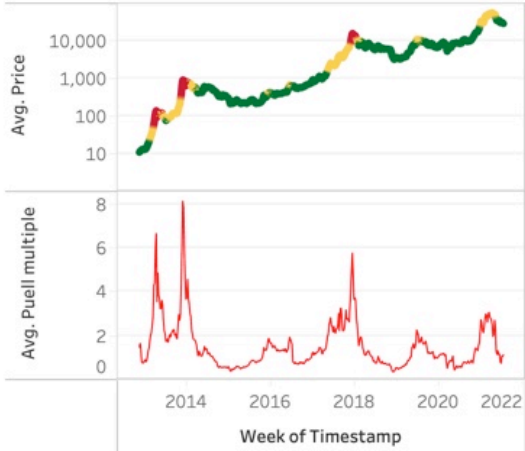
Beyond the impact hypothesis of a user-facing dashboard, I believe it would behoove Unchained-Capital to devote some resources to researching this new arena of on-chain data. Besides correlations with the BTC/USD price, on-chain data could potentially illuminate way more important information for Unchained, such as measuring the growth of multi-sig addresses and short term vs long term holders.

**Communications-** The impact hypothesis was communicated during a 5 minute presentation to the Metis Datascience bootcamp. Those slides can also be found in this repo. Below is a screenshot of a dashboard made in Tableau with some on-chain data visualizations.

### Balanced Price



### Puell Multiple



### Exchange Net Position Change

